

CLAIMS

1. In a process for securing a structural element in the earth in which a cementitious mixture is placed in contact with said structural element, the improvement wherein said cementitious mixture comprises

(a) class C fly ash or other waste product such as cement kiln dust that has cementitious properties; and

(b) more granular industrial waste product comprising calcium, silica, and alumina components.

2. Process as recited in claim 1 wherein said industrial waste product (b) comprises a member selected from the group consisting of bottom ash, economizer ash, steel slag, blast furnace slag, and cement kiln dust and mixtures thereof.

3. Process as recited in claim 2 wherein said cementitious mixture comprises from about 5-50 wt% (a) based on the total weight of said cementitious mixture.

4. Process as recited in claim 3 wherein said industrial waste product (b) is cement kiln dust.

5. Process as recited in claim 3 wherein said industrial waste product (b) is either steel slag or blast furnace slag or mixtures thereof.

6. In a process for securing a structural element in the earth in which a cementitious mixture is placed in contact with said structural element the improvement wherein said cementitious mixture comprises

(a) class "C" fly ash; and

(b) a member selected from the group consisting of bottom ash and economizer ash and mixtures thereof.

7. Process as recited in claim 6 wherein said cementitious mixture comprises from about 5-50 wt% (a) based on the total weight of said cementitious mixture.

8. Process as recited in claim 7 wherein said cementitious mixture comprises about 15-35 wt% (a) based on the total weight of said cementitious mixture.

9. Process as recited in claim 8 wherein said cementitious mixture is devoid of any additional cement or aggregate components.

10. Process as recited in claim 6 further comprising adding water to said cementitious mixture and allowing said mixture to harden.

11. Process as recited in claim 10 wherein said mixture comprises from about 15-35% class "C" fly ash and remainder bottom ash.

12. Process as recited in claim 11 wherein said structural element is a fence post.

13. Process as recited in claim 6 wherein said cementitious mixture consists of 100% coal combustion by-products.

14. Cementitious mixture for securing a fence post or the like in the earth, said composition comprising:

- (a) class C fly ash; and
- (b) an industrial waste product comprising calcium, silica, and alumina components, said (a) being present in an amount of 5-50 wt% based on the total weight of said mixture.

15. Cementitious mixture for securing a fence post or the like in the earth, said composition comprising

- (a) class "C" fly ash; and
- (b) a member selected from the group consisting of bottom ash and economizer ash and mixtures thereof, said component (a) being present in an amount of 5-50 wt% based on the total weight of said mixture.

16. Cementitious mixture as recited in claim 15 wherein said component (a) is present in an amount of about 15-35 wt% based on the total weight of said mixture.

17. Cementitious mixture as recited in claim 16 wherein (b) comprises bottom ash and wherein said mixture consists of 100% coal combustion by-products.

18. Cementitious mixture as recited in claim 16 wherein (b) comprises bottom ash and wherein said cementitious mixture is devoid of any additional cement or aggregate components.

19. In a process for securing a structural element in the earth in which a cementitious mixture is placed in contact with said structural element, the improvement wherein said cementitious mixture comprises

- (a) class C fly ash; and
- (b) an industrial waste product comprising calcium, silica, and alumina components.